



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/631,107

07/31/2003

Michael John Hodgson

CA1169

7745

23493

7590

12/29/2008

SUGHRUE MION, PLLC

2100 Pennsylvania Avenue, N.W.

Washington, DC 20037

EXAMINER

NORMAN, SAMICA L

ART UNIT

PAPER NUMBER

3696

NOTIFICATION DATE

DELIVERY MODE

12/29/2008

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

USPTO@sughrue.com

USPatDocketing@sughrue.com

Office Action Summary	Application No. 10/631,107	Applicant(s) HODGSON, MICHAEL JOHN	
	Examiner SAMICA L. NORMAN	Art Unit 3696	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 11, 12, 15 and 16 is/are pending in the application.
- 4a) Of the above claim(s) 8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 11, 12, 15 and 16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claims 1-7, 11, 12, 15 and 16 are pending. Claims 9, 10, 13 and 14 are cancelled.

The previous 35 U.S.C. 112, second paragraph are withdrawn due to applicant's current amendment.

Claim Objections

1. Claims 1, 12 and 16 are objected to because of the following informalities: Claim 1 recites "receiving a first level of an underlying **as at** or around said first reference time." Appropriate correction is required.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
3. Claims 1-7, 11, 12, 15 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
4. Regarding claims 1, 12 and 16. These claims recite the phrase "**matching** the first inputs and the bid prices and the offer prices **to form contracts**." It is unclear how merely matching data can cause a contract to be formed.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 1-7 and 11, 12, 15 and 16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

7. Regarding claim 1. In many instances it is clear within which of the enumerated categories a claimed invention falls. The question of whether a claim encompasses statutory subject matter should not focus on which of the four categories of subject matter a claim is directed to -- process, machine, manufacture, or composition of matter -- but rather on the essential characteristics of the subject matter, in particular, its practical utility. In the instant invention, the claimed subject matter does not cover either a 101 judicial exception or a practical application of a 101 judicial exception. The instant application is directed to abstract ideas. The subject matter courts have found to be outside of, or exceptions to, the four statutory categories of invention is limited to abstract ideas, laws of nature and natural phenomena. While this is easily stated, determining whether an applicant is seeking to patent an abstract idea, a law of nature or a natural phenomenon has proven to be challenging. These three exclusions recognize that subject matter that is not a practical application or use of an idea, a law of nature or a natural phenomenon is not patentable. See, e.g., *Rubber-Tip Pencil Co. v. Howard*, 87 U.S. (20 Wall.) 498, 507 (1874) (“idea of itself is not patentable, but a new device by which it may be made practically useful is”); *Mackay Radio & Telegraph Co. v. Radio Corp. of America*, 306 U.S. 86,

94, 40 USPQ 199, 202 (1939) (“While a scientific truth, or the mathematical expression of it, is not patentable invention, a novel and useful structure created with the aid of knowledge of scientific truth may be.”); Warmerdam, 33 F.3d at 1360, 31 USPQ2d at 1759 (“steps of ‘locating’ a medial axis, and ‘creating’ a bubble hierarchy . . . describe nothing more than the manipulation of basic mathematical constructs, the paradigmatic ‘abstract idea’”).

8. Based on Supreme Court precedent and recent Federal Circuit decisions, the Office's guidance to examiners is that a § 101 process must (1) be tied to another statutory class (such as a particular apparatus) or (2) transform underlying subject matter (such as an article or materials) to a different state or thing. If neither of these requirements is met by the claim, the method is not a patent eligible process under § 101 and should be rejected as being directed to nonstatutory subject matter. *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *Cochrane v. Deener*, 94 U.S. 780, 787-88 (1876). In the instant application the process is not tied to another statutory class.

9. An example of a method claim that would qualify as a statutory process would be a claim that recited purely mental steps. Thus, to qualify as a § 101 statutory process, the claim should positively recite the other statutory class (the thing or product) to which it is tied, for example by identifying the apparatus that accomplishes the method steps, or positively recite the subject matter that is being transformed, for example by identifying the material that is being changed to a different state.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 1 and 11, 12, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mosler et al., U.S. Patent No. 6,304,858 (reference A on the attached PTO-892) in view of McGill et al., U.S. PG-Pub No. 2003/0101125 (reference C on the attached PTO-892).

12. As per claims 1, 12 and 16, Mosler et al. teaches a computer-implemented method for trading, between a buyer and a seller at an exchange, futures exchange, and options exchange, or a futures exchange, the method comprising: receiving first inputs from the buyer and seller corresponding to a standardized form of contract for trading at a price on which the buyer and the seller agree, the standardized form of contract having contract terms requiring the buyer and seller to settle based on a final settlement price (see column 4, lines 27-29); receiving second inputs from the buyer and the seller at or prior to a first reference time wherein the second inputs include bid prices and offer prices for the standardized form of contract (see column 8, lines 48-52); matching the first inputs and the bid prices and the offer prices to form contracts (see column 4, lines 29-36); determining said final settlement price as follows: receiving a first level of an underlying as at or around said first reference time, the first reference time determined in accordance with the contract terms (see column 7, lines 40-44), the underlying being a specific observable quantity relating to an item selected from a group consisting of stock, commodity,

Art Unit: 3696

financial asset, basket of financial assets, financial index and financial contract (see column 3, lines 64-67); receiving a second level of said underlying at a second reference time, the second reference time determined in accordance with the contract terms, and being later than said first reference time; and determining, in accordance with contract terms, the final settlement price by reference to both said first level and said second level (see column 7, lines 40-51).

13. As per claim 11, Mosler et al. teaches the method of claim 1 as described above. Mosler et al. further teaches wherein the trading is performed further utilizing telephone, internet, or a wide area network (see column 5, lines 50-56, column 7, lines 63-67 and column 8, lines 1-21).

14. As per claim 12, Mosler et al. teaches a computer system for receiving and processing trade order information for trading between a buyer and a seller, the computer system being associated with an exchange, a futures exchange, an options exchange, or a futures and options exchange (see column 8, lines 48-55), the computer system comprising: an input interface for receiving inputs of data, an output interface for providing outputs, a processor for processing the data and generating the outputs; and a memory for storing the data and computer programs (see Figure 7 and column 14, lines 64-67 and column 15, lines 1-34), wherein the computer system is adapted to performing a computer-implemented method comprising: receiving first inputs from the buyer and seller corresponding to a standardized form of contract for trading at a price on which the buyer and the seller agree, the standardized form of contract having contract terms requiring the buyer and seller to settle based on a final settlement price (see column 4, lines 27-29); receiving second inputs from the buyer and the seller at or prior to a first reference time wherein the second inputs include bid prices and offer prices for the standardized form of contract (see column 8, lines 48-52); matching the first inputs and the bid prices and the offer

Art Unit: 3696

prices to form contracts (see column 4, lines 29-36); determining said final settlement price as follows: receiving a first level of an underlying as at or around said first reference time, the first reference time determined in accordance with the contract terms (see column 7, lines 40-44), the underlying being a specific observable quantity relating to an item selected from a group consisting of stock, commodity, financial asset, basket of financial assets, financial index and financial contract (see column 3, lines 64-67); receiving a second level of said underlying at a second reference time, the second reference time determined in accordance with the contract terms, and being later than said first reference time; and determining, in accordance with contract terms, the final settlement price by reference to both said first level and said second level (see column 7, lines 40-51).

15. As per claim 15, Mosler et al. teaches the method of claim 1 as described above. Mosler et al. further teaches settling trades by clearing, through a clearinghouse, the standardized contracts (see column 4, lines 29-36).

16. As per claim 16, Mosler et al. teaches a computer readable medium embodying a set of computer executable instructions (see column 15, lines 35-52), which, when executed by one or more processors cause the one or more processors to perform a computer-implemented method for trading between a buyer and a seller to an exchange, a futures exchange, an options exchange, or a futures and options exchange; wherein the computer-implemented method includes: receiving first inputs from the buyer and seller corresponding to a standardized form of contract for trading at a price on which the buyer and the seller agree, the standardized form of contract having contract terms requiring the buyer and seller to settle based on a final settlement price (see column 4, lines 27-29); receiving second inputs from the buyer and the seller at or

Art Unit: 3696

prior to a first reference time wherein the second inputs include bid prices and offer prices for the standardized form of contract (see column 8, lines 48-52); matching the first inputs and the bid prices and the offer prices to form contracts (see column 4, lines 29-36); determining said final settlement price as follows: receiving a first level of an underlying as at or around said first reference time, the first reference time determined in accordance with the contract terms (see column 7, lines 40-44), the underlying being a specific observable quantity relating to an item selected from a group consisting of stock, commodity, financial asset, basket of financial assets, financial index and financial contract (see column 3, lines 64-67); receiving a second level of said underlying at a second reference time, the second reference time determined in accordance with the contract terms, and being later than said first reference time; and determining, in accordance with contract terms, the final settlement price by reference to both said first level and said second level (see column 7, lines 40-51).

17. Claims 2-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mosler et al., U.S. Patent No. 6,304,858 (reference A on the attached PTO-892) in view of McGill et al., U.S. PG-Pub No. 2003/0101125 (reference C on the attached PTO-892) and further in view of Lara, U.S. PG-Pub No. 2004/0019555 (reference B on the attached PTO-892).

18. As per claim 2, Mosler et al. teaches the method of claim 1 as described above. Mosler et al. fails to teach wherein said final settlement price so determined, for a given said first level, is one of: zero, if said second level is less than or equal to a strike level; or proportionally to the

Art Unit: 3696

excess of said second level over said strike level, if said second level is greater than said strike level; wherein said strike level is said first level subject to a multiplicative factor or a constant adjustment or no adjustment. Lara teaches wherein said final settlement price so determined, for a given said first level, is one of: zero, if said second level is less than or equal to a strike level; or proportionally to the excess of said second level over said strike level, if said second level is greater than said strike level; wherein said strike level is said first level subject to a multiplicative factor or a constant adjustment or no adjustment (see paragraph 0026, lines 11-14). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the method of Mosler et al since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

19. As per claim 3, Mosler et al. teaches the method of claim 1 as described above. Mosler et al. fails to teach wherein said final settlement price so determined, for a given said first level, is one of: zero, if said second level is less than or equal to a strike level; or proportional to the excess of said strike level over said second level, if said second level is greater than said strike level; wherein said strike level is said first level subject to a multiplicative factor or a constant adjustment or no adjustment. Lara teaches wherein said final settlement price so determined, for a given said first level, is one of: zero, if said second level is less than or equal to a strike level; or proportional to the excess of said strike level over said second level, if said second level is greater than said strike level; wherein said strike level is said first level subject to a multiplicative factor or a constant adjustment or no adjustment (see paragraph 0026, lines 11-14). It would

Art Unit: 3696

have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the method of Mosler et al since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

20. As per claim 4, Mosler et al. teaches the method of claim 1 as described above. Mosler et al. fails to teach wherein said final settlement price so determined, for a given said first level, is one of: proportional to the excess of said second level over a call strike level, if said second level is greater than said call strike level; proportional to the excess of a put strike level over said second level, if said second level is less than said put strike level; or zero, if said second level is both less than said call strike level and greater than said put strike level; wherein said call strike level is said first level subject to a multiplicative or additive adjustment, and said put strike level is said first level subject to a multiplicative factor or a constant adjustment or no adjustment.

Lara teaches wherein said final settlement price so determined, for a given said first level, is one of: proportional to the excess of said second level over a call strike level, if said second level is greater than said call strike level; proportional to the excess of a put strike level over said second level, if said second level is less than said put strike level; or zero, if said second level is both less than said call strike level and greater than said put strike level; wherein said call strike level is said first level subject to a multiplicative or additive adjustment, and said put strike level is said first level subject to a multiplicative factor or a constant adjustment or no adjustment (see paragraph 0027, lines 7-10). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the method of Mosler et al since the claimed

Art Unit: 3696

invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

21. As per claim 5, Mosler et al. teaches the method of claim 1 as described above. Mosler et al. fails to teach wherein said final settlement price so determined, for a given said first level, is one of: zero, if said second level is less than or equal to a strike level; or proportional to the square of the excess of said second level over said strike level, if said second level is greater than said strike level; wherein said strike level is said first level subject to a multiplicative a factor or a constant adjustment or no adjustment. Lara teaches wherein said final settlement price so determined, for a given said first level, is one of: zero, if said second level is less than or equal to a strike level; or proportional to the square of the excess of said second level over said strike level, if said second level is greater than said strike level; wherein said strike level is said first level subject to a multiplicative factor or a constant adjustment or no adjustment (see paragraph 0026, lines 11-14). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the method of Mosler et al since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

22. As per claim 6, Mosler et al. teaches the method of claim 1 as described above. Mosler et al. fails to teach wherein said final settlement price so determined, for a given said first level, is one of: zero, if said second level is greater than or equal to a strike level; or proportional to the square of the excess of said second level over said strike level, if said second level is greater than

Art Unit: 3696

said strike level; wherein said strike level is said first level subject to a multiplicative factor or a constant adjustment or no adjustment. Lara teaches wherein said final settlement price so determined, for a given said first level, is one of: zero, if said second level is greater than or equal to a strike level; or proportional to the square of the excess of said second level over said strike level, if said second level is greater than said strike level; wherein said strike level is said first level subject to a multiplicative factor or a constant adjustment or no adjustment (see paragraph 0027, lines 7-10). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the method of Mosler et al since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

23. As per claim 7, Mosler et al. teaches the method of claim 1 as described above. Mosler et al. fails to teach wherein said final settlement price so determined, for a given said first level, is one of: proportional to the square of the excess of said second level over a call strike level, if said second level is greater than said call strike level; proportional to the excess of a put strike level over said second level, if said second level is less than said put strike level; or zero, if said second level is both less than said call strike level and greater than said put strike level; wherein said call strike level is said first level subject to a multiplicative or additive adjustment, and said put strike level is said first level subject to a multiplicative a factor or a constant adjustment or no adjustment. Lara teaches wherein said final settlement price so determined, for a given said first level, is one of: proportional to the square of the excess of said second level over a call strike level, if said second level is greater than said call strike level; proportional to the excess of a put

Art Unit: 3696

strike level over said second level, if said second level is less than said put strike level; or zero, if said second level is both less than said call strike level and greater than said put strike level; wherein said call strike level is said first level subject to a multiplicative or additive adjustment, and said put strike level is said first level subject to a multiplicative factor or a constant adjustment or no adjustment (see paragraph 0027, lines 7-10). It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate this feature into the method of Mosler et al since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Response to Arguments

24. Applicant's arguments filed October 6, 2008 have been fully considered but they are not persuasive.

25. Regarding the 35 U.S.C. Rejection. The other statutory class must be positively recited. It can not merely be stated in the preamble. It must be tied to the critical steps in the body of the claim.

26. Applicant argues in Mosler et al. the settlement price is not **a function** of prices at both times. This language is being using in the claims. The claims recite “the final settlement price **by reference** to both said first level and said second level.” The terms function and reference do not share the same meaning by definition.

Conclusion

27. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

28. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to SAMICA L. NORMAN whose telephone number is (571)270-1371. The examiner can normally be reached on Mon-Thur 6:30a-5p, w/ Fri off.

30. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Dixon can be reached on (571) 272-6803. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3696

31. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ella Colbert/
Primary Examiner, Art Unit 3696

sln